EXPENDITURES ON ACCOUNT OF COAST SURVEY.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A report of expenditures on account of Coast Survey for the fiscal year ended June 30, 1878.

January 29, 1879.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, January 28, 1879.

Sir: In accordance with the provisions of act of Congress approved March 3, 1853, I have the honor to transmit herewith a copy of a letter of the 27th instant from Mr. C. P. Patterson, Superintendent of the United States Coast Survey, inclosing a report of expenditures on account of the Coast Survey for the fiscal year ending June 30, 1878.

Very respectfully,

JOHN SHERMAN, Secretary.

Hon. Samuel J. Randall, Speaker of the House of Representatives.

> United States Coast and Geodetic Survey Office, Washington, January 27, 1879.

Sir: Herewith, for transmission to Congress, as required by act approved March 3, 1853, I have the honor to forward a report of expenditures on account of this service for the fiscal year ending June 30, 1878.

Very respectfully,

C. P. PATTERSON,
Superintendent.

Hon. John Sherman, Secretary of the Treasury. List showing the number and names of persons employed in the Coast and Geodetic Survey during the fiscal year ending June 30, 1878, the amount of compensation and time of employment, with a statement of all expenditures made under the direction of the Superintendent of the Coast and Geodetic Survey; prepared pursuant to act of Congress approved March 3, 1853.

	Amount of compensation.	Time employed.	Remarks.
SUPERINTENDENT.			
C. P. Patterson	\$6,000 00	1 year	
CONSULTING GEOMETER.			
Benjamin Peirce	4,000 00	1 year	
ASSISTANT IN CHARGE OF OFFICE.			
J. E. Hilgard	4, 200 00	1 year	
ASSISTANTS.			
George Davidson	3, 730 00	1 year	
George Davidson Richard D. Cutts C. O. Boutelle Henry Mitchell Henry L. Whiting F. H. Gerdes	3, 620 00	1 year	
Henry Mitchell	3, 620 00 3, 200 00 3, 160 00 3, 150 00	1 year	
Henry L. Whiting	3, 160 00	1 year	
F. H. Gerdes	3, 150 00	1 year	
W. W. Cooper	3, 480 00	1 year	
S. Peirce	2, 870 00	1 year	
W. E. Greenwell	2, 870 00 2, 870 00 2, 870 00 2, 750 00 2, 640 00	1 year 1 year	
r. H. Gerdes W. W. Cooper George W. Dean J. S. Peirce W. E. Greenwell A. F. Rodgers A. M. Harrison George A. Fairfield I. A. Sullivan	2,640 00	1 year	
A. M. Harrison	2, 180 00 2, 180 00	1 year	
. A. Sullivan	2, 180 00	1 year	
A. Sullivaii ames S. Lawson lleveland Rockwell A. W. Longfellow P. Webber W. H. Dennis	2, 120 00 2, 120 00 2, 120 00 2, 070 00	1 year	
Sleveland Rockwell	2, 120 00	1 year	
A. W. Longfellow	2, 070 00 139 11	1 year	
V H Dennis	2, 070 00	25 days 1 year	
Edward Goodfellow	9 010 00	1 year	
Thanks M. Dasha	00 010 0	1 year	
ohn W. Donn J. T. Mosman J. H. Boyd Charles Hosmer J. T. Iardella	2, 010 00 2, 010 00 2, 010 00 2, 010 00 1, 950 00	1 year	
1. H. Royd	1 950 00	1 year1 year	
Charles Hosmer	1, 950 00	1 year	
C. T. Iardella	1,900 00	1 year	
	1. 900 00	1 year	
R E Halter	1,840 00	1 year	
R. M. Bache	1, 800 00 1, 780 00 1, 780 00 1, 750 00	1 year	
C. McCorkle. L. Halter L. M. Bache. Cred. F. Nes L. W. Chase	1,780 00	1 year	
A. W. Chase	1,750 00	1 year	
A. Sengteller	1,750 00 1,610 00	1 year	
H. G. Ogden	1,600 00	1 year	
A. Sengteller Jershom Bradford L. G. Ogden J. L. Marindin Prancis Blake, jr	1,600 00	1 year	
Francis Blake, jr	946 16	9 months and	
Villiam Eimbeck	1,600 00	14 days. 1 year	
tohman Formar	1,500 00	1 year	
. J. Gilbert	1, 508 33	1 vear	
Walley Perkins	1, 583 33	1 year	
J. Gilbert V. Walley Perkins H. Tittmann D. Granger A. Colonna Julyin Smith	1, 483 33 1, 483 33	1 year	
3. A. Colonna	1, 483 33 1, 335 00	1 year	
Edwin Smith	1, 283 34	1 year 1 year	
ACTING ASSISTANT.			
V. H. Dall	1,500 00	1 year	
SUBASSISTANTS.			
	1,100 00	1 year	
V. Irving Vinal Joseph Hergesheimer Andrew Braid Eugène Ellicott	1, 100 00	1 year	
Andrew Braid	1, 100 00	I vear	
Sugene Ellicott	1,025 00	1 year 1 month	
V. H. Blair	83 33	1 month	
ENGINEERS ON HYDROGRAPHIC VESSELS.		112 470 - 17	
William M. Rodes	2, 547 42	1 year	
Villiam H. Mapes	2, 093 00	1 year	

List of persons employed in the Coast and Geodetic Survey, &c.—Continued.

	Amount of compensation.	Time employed.	Remarks.
DISBURSING AGENT.		in the same of	
J. W. Porter	\$2,500 00	1 year	
BOOKKEEPER AND ACCOUNTANT.			
R. L. Hawkins	2,000 00	1 year	
	2,000	3 0000	
OFFICE OF THE SUPERINTENDENT.	1 000 00	1	
samuel Hein, clerk William B. Chilton, clerk	1, 800 00 840 00	1 year	
COMPUTERS.			
Charles A. Schott, assistant	2,760 00 $950 00$	1 year 7 months	
G. Rumpf	1,740 00	1 year	
M. H. Doolittle	1,680 00	1 year	
M. W. Wines	1, 200 00 92 26	1 year 43 days	
T. B. Baylor	668 71	9½ months	
C. H. Van Orden H. W. Blair	$\begin{vmatrix} 225 & 00 \\ 420 & 00 \end{vmatrix}$	3 months	
Francis H. Parsons	300 00	4 months	
J. Hosmer Lane	390 00 350 00	3 months	
M. E. Nesbitt, writer	720 00	1 year	
William B. French, writer Paul Labanoff	412 50 168 00	5½ months 48 days	
C. Powalky	150 00	1 month	
ASTRONOMICAL COMPUTER.			
Marcus Baker	1,500 00	1 year	
TIDE-COMPUTERS.			
R. S. Avery	2,000 00	1 year	
John Downes	800 00 720 00	1 year 1 year	
L. P. Shidy.	900 00	1 year	
DRAUGHTSMEN.			
W. T. Bright, in charge	2,050 00	1 year	
A. Lindenkohl Louis Karcher.	2, 350 00 1, 794 00	1 year 1 year	
C. A. Mueth	1. 196 00	1 year	
P. Erichson	1, 248 00	1 year	
Bion Bradbury E. Hergesheimer.	$\frac{450\ 00}{1,700\ 00}$	6 months	Contract.
H. Lindenkohl	2, 100 00	1 year	
E. J. Sommer	535 00		Contract.
HYDROGRAPHIC DRAUGHTSMEN.	* - 5 - 1 - 1		
E. Willenbucher	2,000 00 1,800 00	1 year 1 year	
Charles Junken	998 40	1 year	
J. Sprandel	252 20	52 days	
SUBOFFICE, SAN FRANCISCO.			
G. Farquhar, draughtsmanVincente Denis, janitor	1,800 00 892 04	1 year 1 year	
ENGRAVERS.	002 01		
E. A. Maedel	2,000 00	1 year	
A. Sengteller	1, 800 00 1, 716 00	1 year	
H. M. Knight A. Peterson	1,716 00	1 year 1 year	
William A. Thompson	1,716 00 1,716 00	1 year	
John G. Thompson	1,560 00	1 year	
John J. Young E. Molkow	$1,612 00 \\ 1,248 00$	1 year 1 year	1 1 1 1 1 1
Edward M. Sipe	1, 248 00 1, 228 50	1 year	I HOR THE REAL
William H. Davis	1, 170 00 1, 664 63	1 year 1 year	Contract.
R. F. Bartle	826 55		Contract.
F. Courtenay	682 68 675 00		Contract.
H. C. Evans Theo. Wasserbach	62 50		Contract.

List of persons employed in the Coast and Geodetic Survey, &c.—Continued.

Laborate Laborate Commence	Amount of compensation.	Time employed.	Remarks.
WRITERS.			
George A. Morrison. L. C. Kerr. John H. Smoot.	\$840 00 486 29 60 00	1 year 6½ months 1 month	
ELECTROTYPISTS.			
A. Zumbroch Frank Over, assistant.	2, 000 00 1, 000 00	1 year 1 year	
MISCELLANEOUS CLERK.			
John T. Hoover.	1,846 11	1025 months	July 1, 1877, to May
WRITERS.			25, 1878.
W. A. Herbert C. Abert	1, 200 00 875 00	1 year 1 year	
CLERK IN ARCHIVES.			
G. A. Stewart.	1,500 00	1 year	
MAP-ROOM.			
Thomas McDonnell. Hugo Eichholtz. H. Nessen	$\begin{array}{cccc} 1,400&00\\ 780&00\\ 1,170&00 \end{array}$	1 year 1 year 1 year	
PRINTERS.			
Frank Moore D. N. Hoover	1,560 00 493 00	1 year 1 year	
INSTRUMENT-MAKERS.			
John Clark G. N. Saegmueller. William Jacobi E. Eschleman John J. Clark Werner Suess	1, 560 00 1, 560 00 1, 092 00 929 50 208 00 100 00	1 year 1 year 1 year 2 months 1 month	
CARPENTERS.			
A. Yeatman F. E. Lackey. C. Webster G. W. Clarvoe, laborer	1,560 00 612 50 88 75 7 00	1 year	
PUBLISHING RESULTS.			
William Ferrel, in charge. E. H. Courtenay L. J. Ferrel A. Davies.	$\begin{array}{cccc} 1,050&00\\ 1,620&00\\ 540&00\\ 456&00 \end{array}$	9 months 1 year 1 year 9 months	
EXTRA OBSERVER.			
H. F. Walling	300 00	2 months	
George H. Wilson. F. Westdall. C. H. Van Orden D. B. Wainwright.	240 00 375 00 150 00 75 00	4 months 5 months 2 months 1 month	
Richard M. Harvey C. A. Dorsey M. G. Meade C. B. Turnbull S. B. Walker C. L. Barton	275 00 125 00 139 36 100 00 191 61 136 50	11 months 5 months 4½6 months 4 months 3 months & 6 days. 3 months	
MESSENGERS.			
William H. Butler William Young Nelson Harrod W. B. Ingram Charles Over Henry McKenzie Edward L. Savoy	876 00 821 25 821 25 730 00 730 00 730 00 140 30	1 year	

List of persons employed in the Coast and Geodetic Survey, &c .- Continued.

	Amount of compensation.	Time employed.	Remarks,
WATCHMEN.			
A. C. Whitney	. \$803 00	1 year	
B. Neff		1 year	
William L. Long	. 784 75	1 year	
W. D. Butler, laborer	547 50	1 year	
FIREMEN.			
Richard Waters	730 00	1 year	
Horace Dyer	371 00	7 months	
	312 00		
DRIVER.			
Hazzard McCoy	660 00	1 year	

Expenditures for the survey of the Atlantic and Gulf coast of the United States for the fiscal year ending June 30, 1878.

	187	1877.		78.		
	Quarter ending—		Quarter ending—		Total for year.	
	Sept. 30.	Dec. 31.	Mar. 31.	June 30.		
Triangulation and astronomical. Topography Hydrography Coast Pilot. Geodetic work Pendulum operations Leveling Magnetics Tidal operations Ship keeping, &c. Instruments Office expenses Salaries, office Salaries, field Pay of engineers.	656 78 4, 137 66	\$7, 306 02 6, 462 75 14, 351 54 674 62 2, 801 80 1, 942 32 1, 657 80 1, 029 24 611 36 364 37 4, 358 02 12, 306 99 21, 399 00 515 00	\$2,896 86 7,296 53 15,468 60 494 35 521 30 2,299 91 124 85 947 97 437 25 11,077 42 18,834 11 537 00	\$17, 581 83 8, 906 24 12, 618 23 502 17 9, 780 01 1, 964 87 667 65 863 12 519 05 176 45 13, 866 73 17, 931 99 509 00	\$39, 106 02 29, 634 11 51, 977 04 2, 700 72 18, 889 69 7, 145 17 2, 874 74 1, 249 21 3, 765 43 2, 085 26 1, 021 55 8, 672 13 49, 643 43 79, 114 02, 093 00	
Total expenditures	75, 983 29	76, 260 83	61,029 80	86, 697 68	299, 971 60	
Appropriation					300, 000 00 299, 971 60	
Balance					28 40	

Expenditures made for the survey of the western coast of the United States for the fiscal year ending June 30, 1878.

	187	77.	1878.			
	Quarter ending—		Quarter ending—		Total for year.	
	Sept. 30.	Dec. 31.	Mar. 31.	June 30.		
Triangulation Topography Hydrography Geodetic, including tents Tidal operations Office expenses Salaries, office Salaries, field Pay of engine\$rs Total expenditures	\$6, 121 86 5, 875 27 9, 540 72 715 22 92 26 12, 807 25 6, 078 33 637 98 41, 868 89	\$4, 925 39 4, 102 47 7, 691 42 864 12 144 45 13, 450 31 7, 227 50 637 98 39, 043 64	\$1, 045 97 2, 913 43 5, 292 57 271 88 3, 784 42 14, 133 77 8, 830 00 634 98 36, 907 02	\$9, 846 28 8, 205 86 10, 419 11 3, 448 34 236 90 5, 893 24 13, 545 63 9, 943 83 637 98 62, 177 17	\$21, 939 50 21, 097 09 32, 943 82 3, 448 34 2, 088 12 9, 914 37 53, 936 96 32, 079 66 2, 548 92	
AppropriationExpenditures					180, 000 00 179, 996 72	
Balance					3 28	

For repairs and maintenance of the complement of vessels used in the Coast Survey in fiscal year 1878.

ATLANTIC AND GULF COAST.		
Repairs of steamer Blake Repairs of steamer Bache Repairs of steamer Endeavor Repairs of steamer Baton Rouge Repairs of steamer Gedney Repairs of steamer Fathomer Repairs of steamer Hitchcock Repairs of steamer Hitchcock Repairs of schooner Palinurus Repairs of schooner Soroesby Repairs of schooner Silliman Repairs of schooner Caswell Repairs of schooner Ready Repairs of schooner Mohawk Repairs of steam-launches	1,893 797 708 703 425 780 964 1,761 1,524 1,876 698 370 158 290	11 33 62 09 36 48 31 35 35 44 39 00 75 59
WESTERN COAST.		
Repairs of steamer Hassler Repairs of steamer McArthur Repairs of schooner Yukon Repairs of schooner Fauntleroy	257 558	74 23
Total expenditures	29, 734 30, 000	74 00
Balance	265	26
For purchase and repairs of schooner Mohawk	19,905	78

Appropriation.....

Balance.....

20,000 00

94 22

For general expenses of the Coast Survey in fiscal year 1878.

For rent of buildings, numbered 211, South New Jersey avenue, and 215, South Capitol street For rent of fire-proof building, numbered 205 South New Jersey avenue For rent of office, San Francisco, Cal For fuel for all offices and buildings. For the transportation of instruments, maps, and charts; the purchase of new instruments, books, maps, and charts, and for gas and other miscellers are averaged.	\$13,600 5,000 1,847 1,798	00 87 33
laneous expenses		
Total expenditures Appropriation for 1878.	31, 682 32, 000	
Balance		
For publishing the observations and results made in the progress of the survey of	the coast	in
fiscal year 1878. Pay of those employed	\$3,660	00
fiscal year 1878. Pay of those employed Engraving, photolithographing, printing, &e	\$3,660	00 10
fiscal year 1878. Pay of those employed	\$3,660 2,240 5,900	00 10 10
fiscal year 1878. Pay of those employed Engraving, photolithographing, printing, &e Total expenditures	\$3,660 2,240 5,900 6,000	00 10 10 10 00
fiscal year 1878. Pay of those employed. Engraving, photolithographing, printing, &e Total expenditures Appropriation for 1878	\$3,660 2,240 5,900 6,000	00 10 10 10 00
fiscal year 1878. Pay of those employed Engraving, photolithographing, printing, &e Total expenditures Appropriation for 1878 Balance	\$3,660 2,240 5,900 6,000	$00 \\ 10 \\ \hline 10 \\ 00$
fiscal year 1878. Pay of those employed. Engraving, photolithographing, printing, &e Total expenditures Appropriation for 1878	\$3,660 2,240 5,900 6,000 99	00 10 10 00 90

Pay of those employed	1,400	00
Total expenditures	4,700 4,700	00

I certify the foregoing to be a true exhibit of expenditures of the United States Coast and Geodetic Survey for the fiscal year ending June 30, 1878.

J. W. PORTER, Disbursing Agent.